

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (original) An electrochemical cell comprising a cathode, an anode and an electrolyte, wherein:
 - the anode comprises titanium dioxide or a lithium titanate; and
 - the electrolyte comprises an aqueous solution containing lithium and hydroxide ions.
2. (original) A cell according to Claim 1, in which the titanium dioxide or lithium titanate is mesoporous.
3. (original) A cell according to Claim 2, in which the mesoporous titanium dioxide or lithium titanate has a periodic arrangement of substantially uniformly sized pores of cross-section of the order of 10^{-8} to 10^{-9} m.
4. (currently amended) A cell according to Claim 1, in which the cathode ~~positive electrode~~ is formed of a mesoporous material.
5. (original) A cell according to Claim 4, in which the mesoporous material is a metal, a metal oxide, a metal hydroxide, a metal oxy-hydroxide or a combination of any two or more of these.
6. (previously presented) A cell according to Claim 4, in which the mesoporous material comprises a metal selected from: nickel; alloys of nickel, nickel/cobalt alloys and iron/nickel alloys.
7. (original) A cell according to Claim 6, in which the metal is nickel.

8. (currently amended) A cell according to Claim 2 or 4, in which the mesoporous structure of the cathode and/or anode ~~positive and/or negative electrode~~ has a pore diameter within the range from 1 to 10 nm, ~~preferably from 2.0 to 8.0 nm.~~
9. (currently amended) A cell according to Claim 2 or 4, in which the mesoporous structure of the cathode and/or anode ~~positive and/or negative electrode~~ has a pore number density of from 4×10^{11} to 3×10^{13} pores per cm^2 , ~~preferably from 1×10^{12} to 1×10^{13} pores per cm^2 .~~
10. (currently amended) A cell according to Claim 2 or 4, in which at least 85% of the pores in the mesoporous structure of the cathode and/or anode ~~positive and/or negative electrode~~ have pore diameters to within 30%, ~~preferably within 10%, more preferably within 5%,~~ of the average pore diameter.
11. (currently amended) A cell according to Claim 2 or 4, in which the mesoporous structure of the cathode and/or anode ~~positive and/or negative electrode~~ has a hexagonal arrangement of pores that are continuous through the thickness of the electrode.
12. (original) A cell according to Claim 11, in which the hexagonal arrangement of pores has a pore periodicity of in the range from 5 to 9 nm.
13. (currently amended) A cell according to Claim 2 or 4, in which the mesoporous structure of the cathode and/or anode ~~positive and/or negative electrode~~ is a film having a thickness in the range from 0.5 to 5 micrometers.
14. (currently amended) A cell according to Claim 2 or 4, in which the mesoporous structure of the cathode and/or anode ~~positive and/or negative electrode~~ has a cubic arrangement of pores that are continuous through the thickness of the electrode.

15. (original) A cell according to Claim 1, in which the titanium dioxide or lithium titanate is nanoparticulate.
16. (previously presented) A cell according to Claim 1, in which the anode comprises titanium dioxide.
17. (previously presented) A cell according to Claim 1, in which the anode comprises a lithium titanate.
18. (original) A cell according to Claim 17, in which the lithium titanate is $\text{Li}_4\text{Ti}_5\text{O}_{12}$.
19. (previously presented) A cell according to Claim 1, in which the electrolyte comprises an aqueous solution of lithium hydroxide.
20. (previously presented) A cell according to Claim 1, which is a battery.
21. (previously presented) A cell according to Claim 1, which is a supercapacitor.
22. (new) A cell according to Claim 8, in which the mesoporous structure of the cathode and/or anode has a pore diameter within the range from 2.0 to 8.0 nm.
23. (new) A cell according to Claim 9, in which the mesoporous structure of the cathode and/or anode has a pore number density of from 1×10^{12} to 1×10^{13} pores per cm^2 .
24. (new) A cell according to Claim 10, in which at least 85% of the pores in the mesoporous structure of the cathode and/or anode have pore diameters to within 10% of the average pore diameter.

25. (new) A cell according to Claim 10, in which at least 85% of the pores in the mesoporous structure of the cathode and/or anode have pore diameters to within 5% of the average pore diameter.